

Florida Phosphate Issues- Addendum to the ATSDR Concept

Following the meeting with EPA Region IV staff and ATSDR staff, several issues were left open for discussion. This addendum is to address those open items and clarify discussions of the initial meetings.

Characterization Issues

ATSDR agrees with the proposed site characterization of the impacted areas in central Florida. As stated in the ATSDR documents and re-iterated at the meeting, ATSDR believes the methods proposed by EPA are most effective and an appropriate method for delineating the areas of contamination. ATSDR, by virtue of its legislative mandate does not determine what characterization techniques are to be used nor does the agency select the appropriate remediation steps and goals that need to be selected at hazardous waste sites. ATSDR does, however, determine if those steps and goals are protective of public health. Consistent with that, ATSDR can not suggest any other approach.

ATSDR, EPA, CERCLA

The CERCLA legislation mandates that ATSDR consider exposures to hazardous substances that could result in observable adverse health effects (42USC9601), factoring in any recommended exposure or tolerance limits for such hazardous substances. To achieve this mandate, ATSDR establishes Minimal Risk Levels (MRL) based on peer-reviewed studies and an external peer-review process prior to adopting the selected MRL. For ionizing radiation, ATSDR established an MRL of 1 millisievert (mSv; 100 millirem) per year for chronic exposure. This value is also found in 10 CFR 20 as well as other federal documentation.

CERCLA regulations followed by EPA require that EPA use risk limits to protect human health and the environment. In most cases, these risk limits result in allowable doses which are much lower than ATSDR MRL values and the associated risks would never be observed in a typical population.

ATSDR and Florida Phosphate Sites

The concept that ATSDR proposes to address the public health issues associated with exposures to ionizing radiation related to these Florida sites is the approach ATSDR has used at other sites contaminated with radium or other forms of radioactive materials (Table I).

Table I. Graded Decision Guidelines used at the Austin Avenue Radiation Site

Action	Gamma Radiation Dose Level	Radon Exposure
Relocation	500 millirem per year	greater than 20 pCi/L
seek to reduce exposure or dose; get site specific information	100 to 500 millirem per year	4 to 20 pCi/L; if 4 recommend retesting
no action required	100 millirem per year or less	less than 4 pCi/L

ATSDR will support any proposed EPA clean up level that will result in a radiological dose of less than 100 millirem per year.